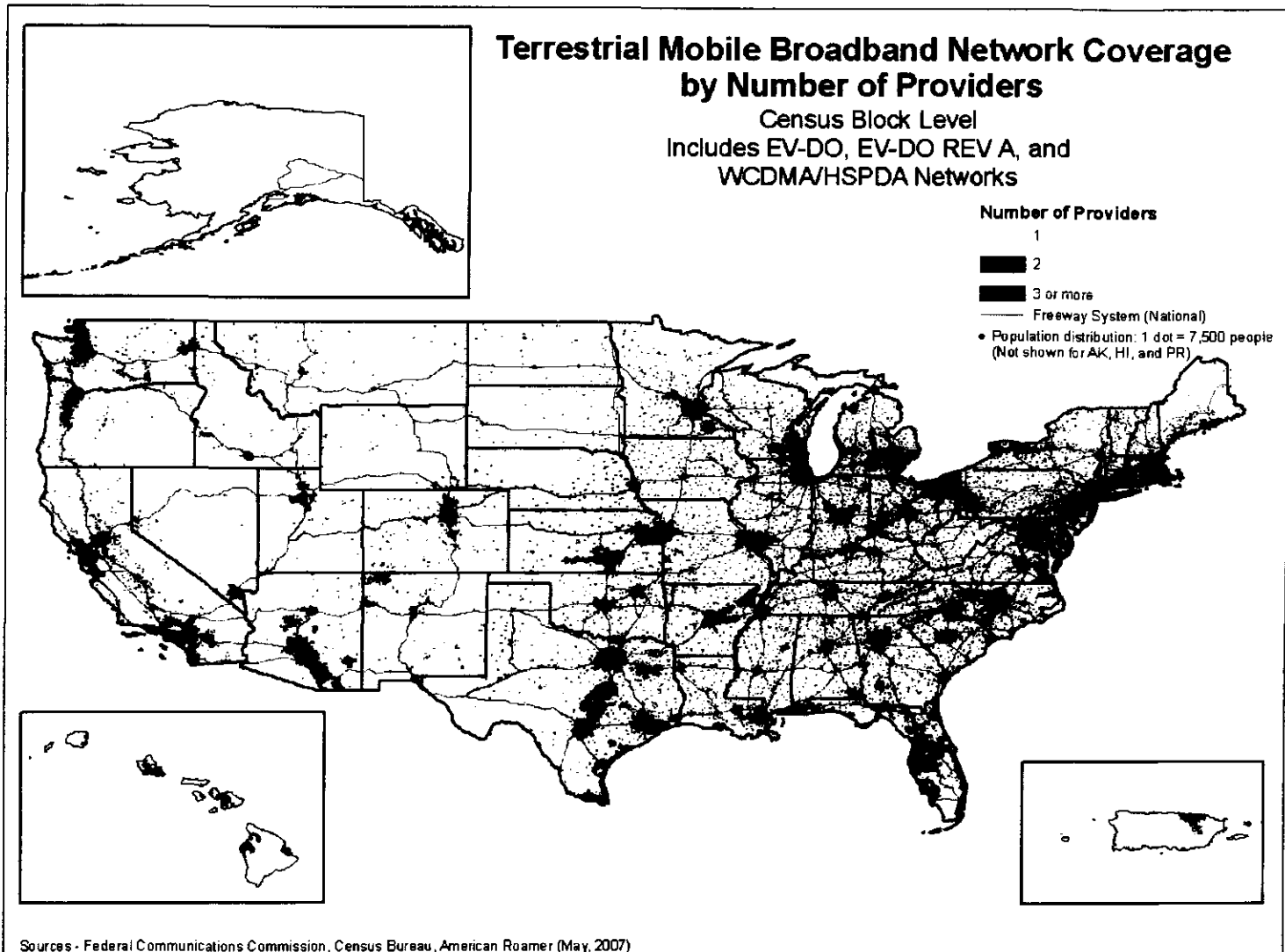
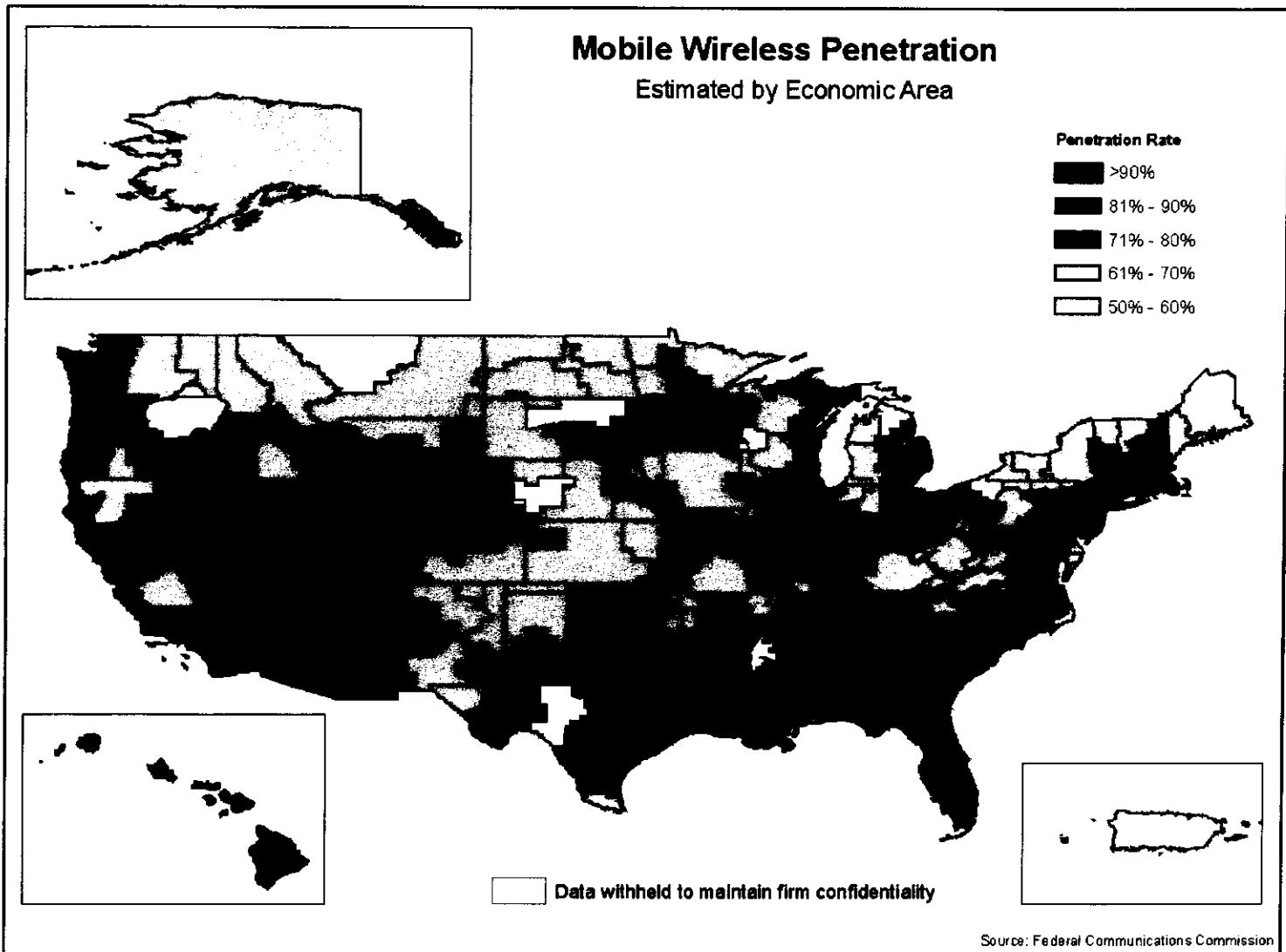


Map B-44: Mobile Broadband Network Coverage (2)



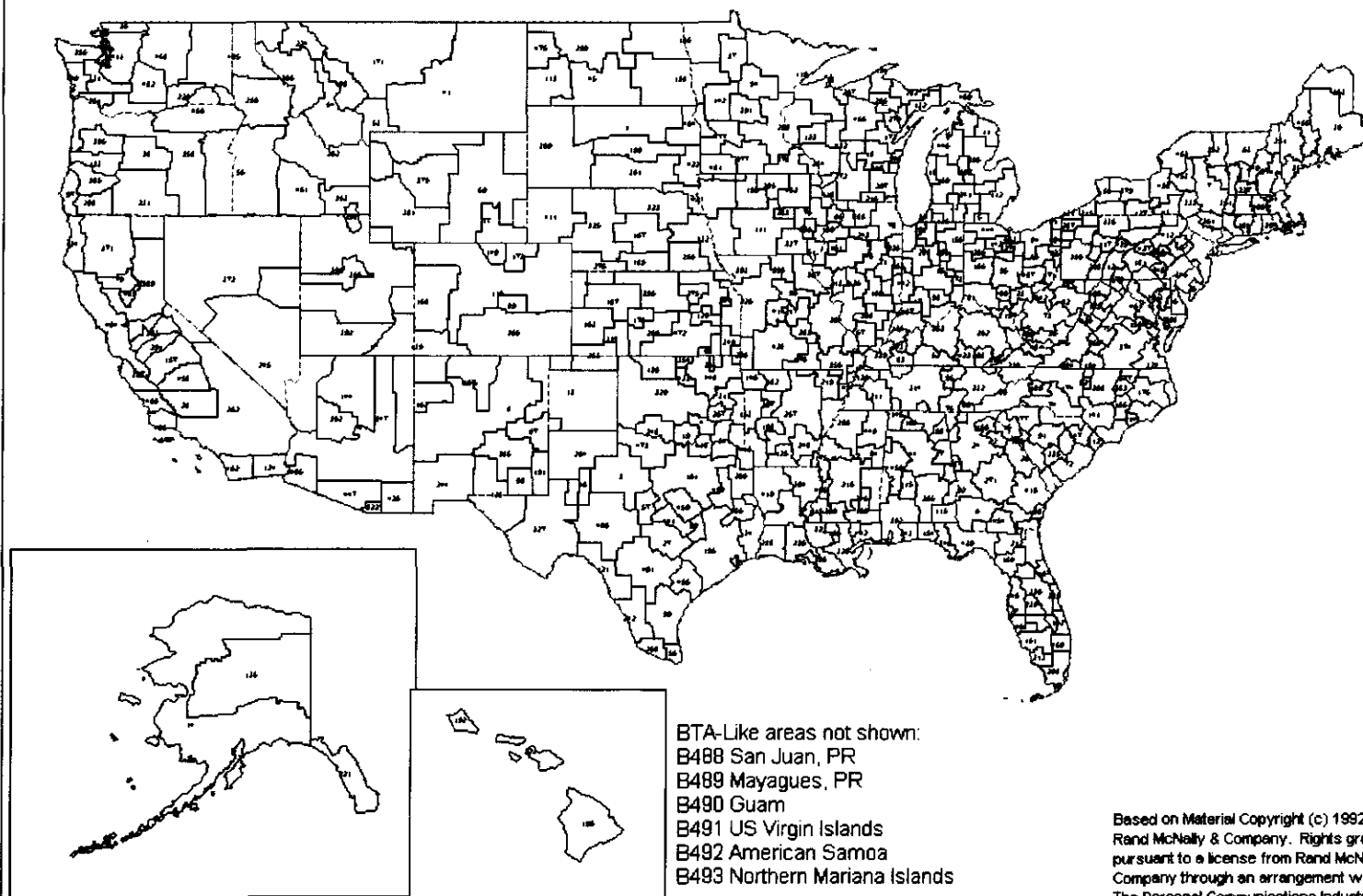
Map B-45: Mobile Wireless Penetration



**Geographic Licensing Schemes**

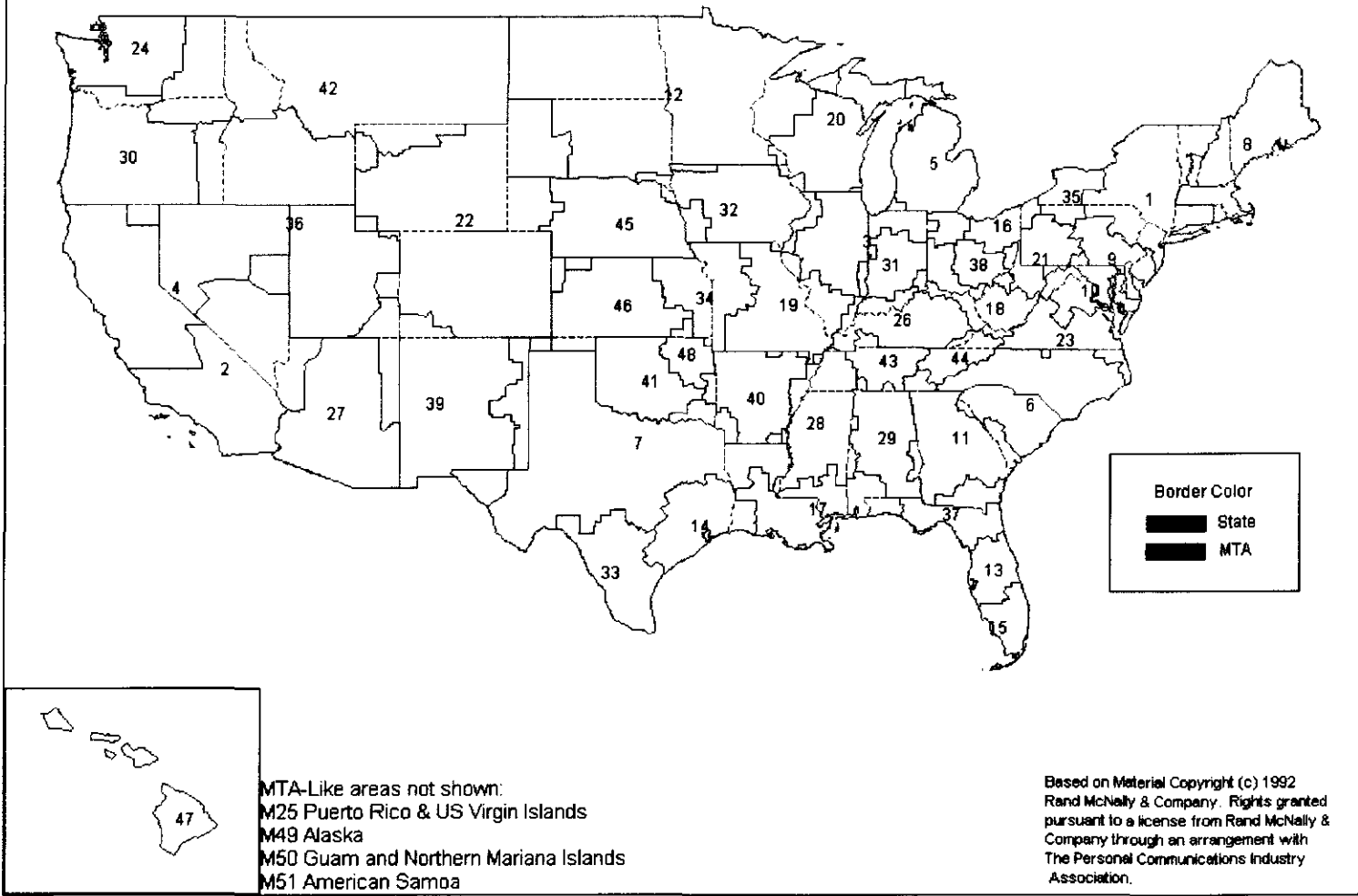
Geographic Licensing Schemes	Number of Market Areas	Note
<b>Basic Trading Areas (BTAs)</b>	<b>493</b>	<b>BTAs make up MTAs</b>
<b>Major Trading Areas (MTAs)</b>	<b>51</b>	
<b>Cellular Market Areas (CMAs)</b>	<b>734</b>	<b>Also known as MSAs and RSAs</b>
<b>Economic Areas (EAs)</b>	<b>175</b>	
<b>Regional Economic Area Groupings (REAGS)</b>	<b>12</b>	

# The 493 Basic Trading Areas (BTAs)



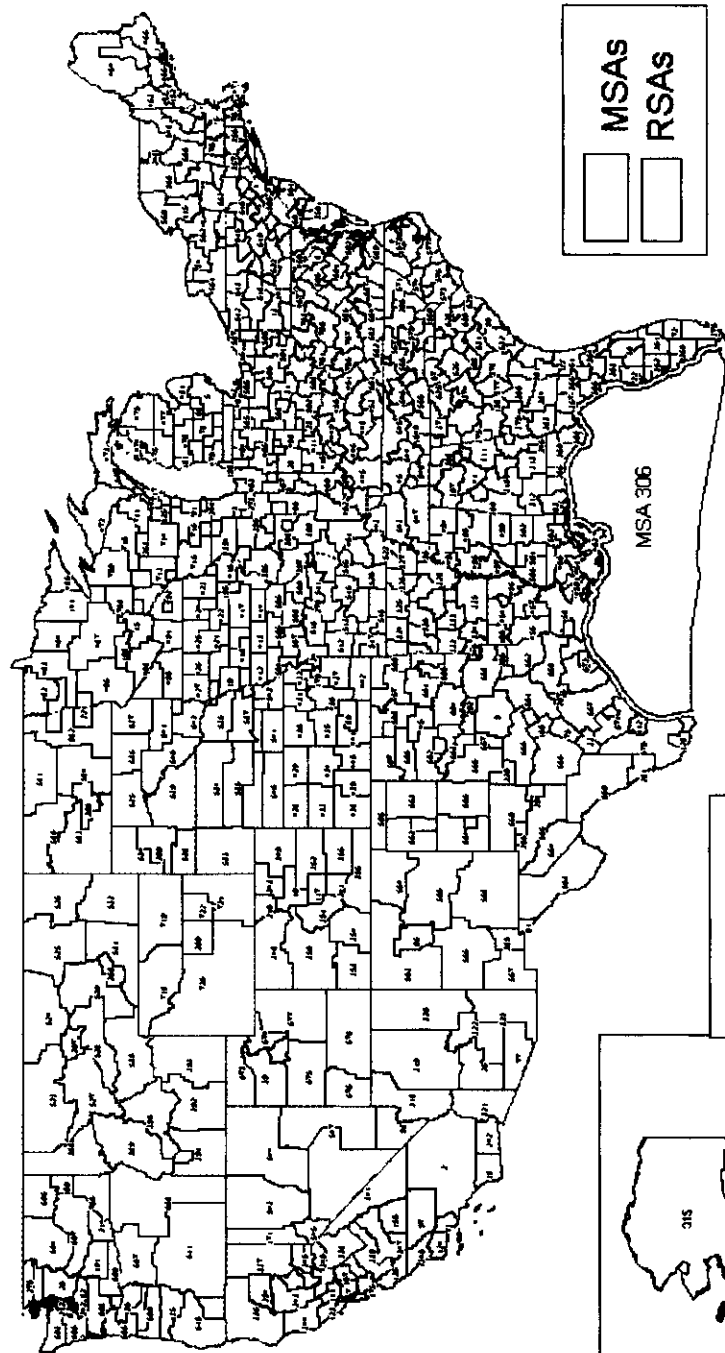
Map B-47

# The 51 Major Trading Areas (MTAs)



Map B-48

# Cellular Market Areas Metropolitan Statistical Areas and Rural Service Areas



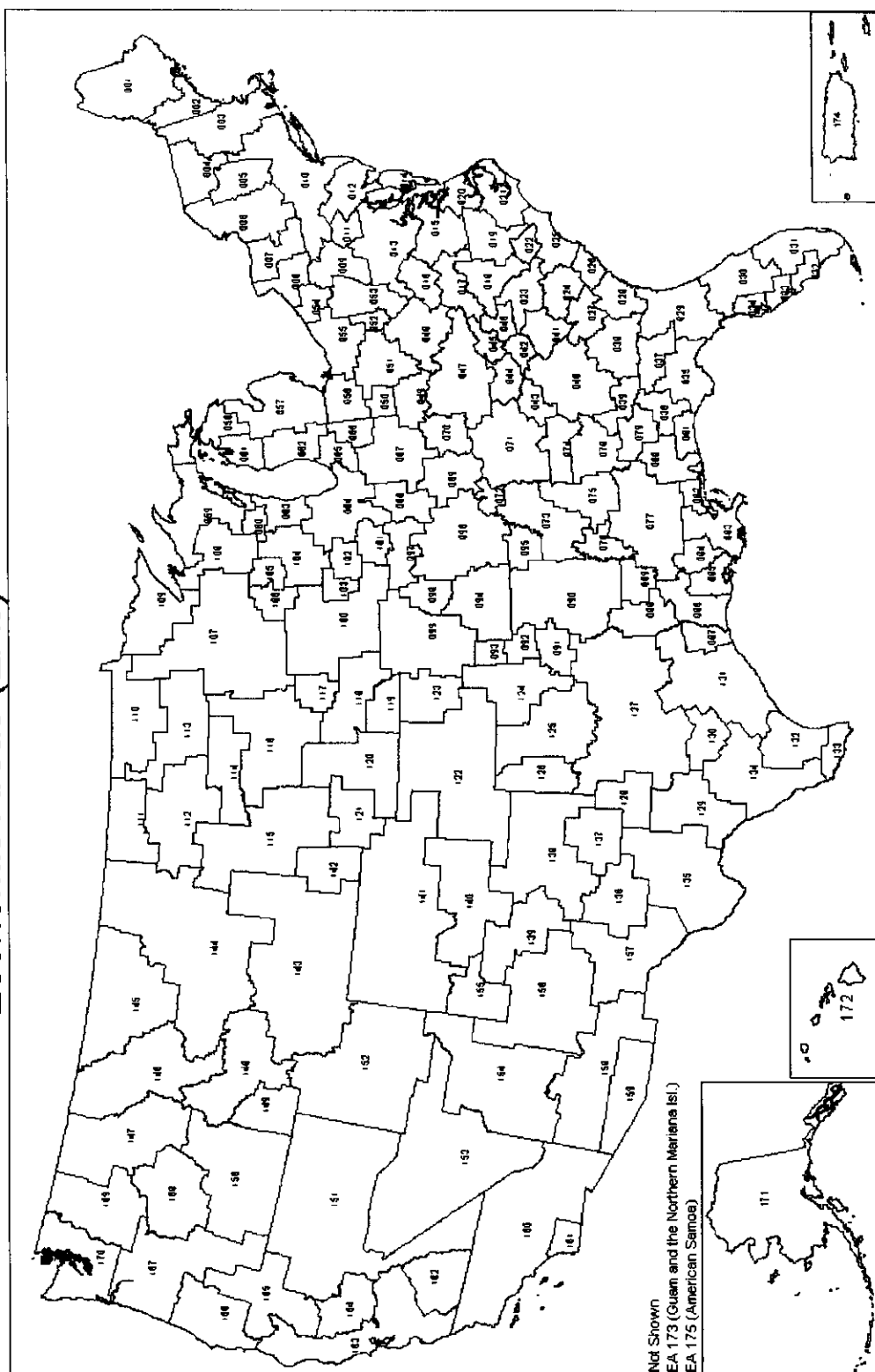
MSAs  
RSAs

RSAs not shown  
730-731 U.S. Virgin Islands  
732 Guam  
733 American Samoa  
734 Northern Mariana Isl.

Note: Due to the size and the quantity of RSAs and MSAs not all numbers appear

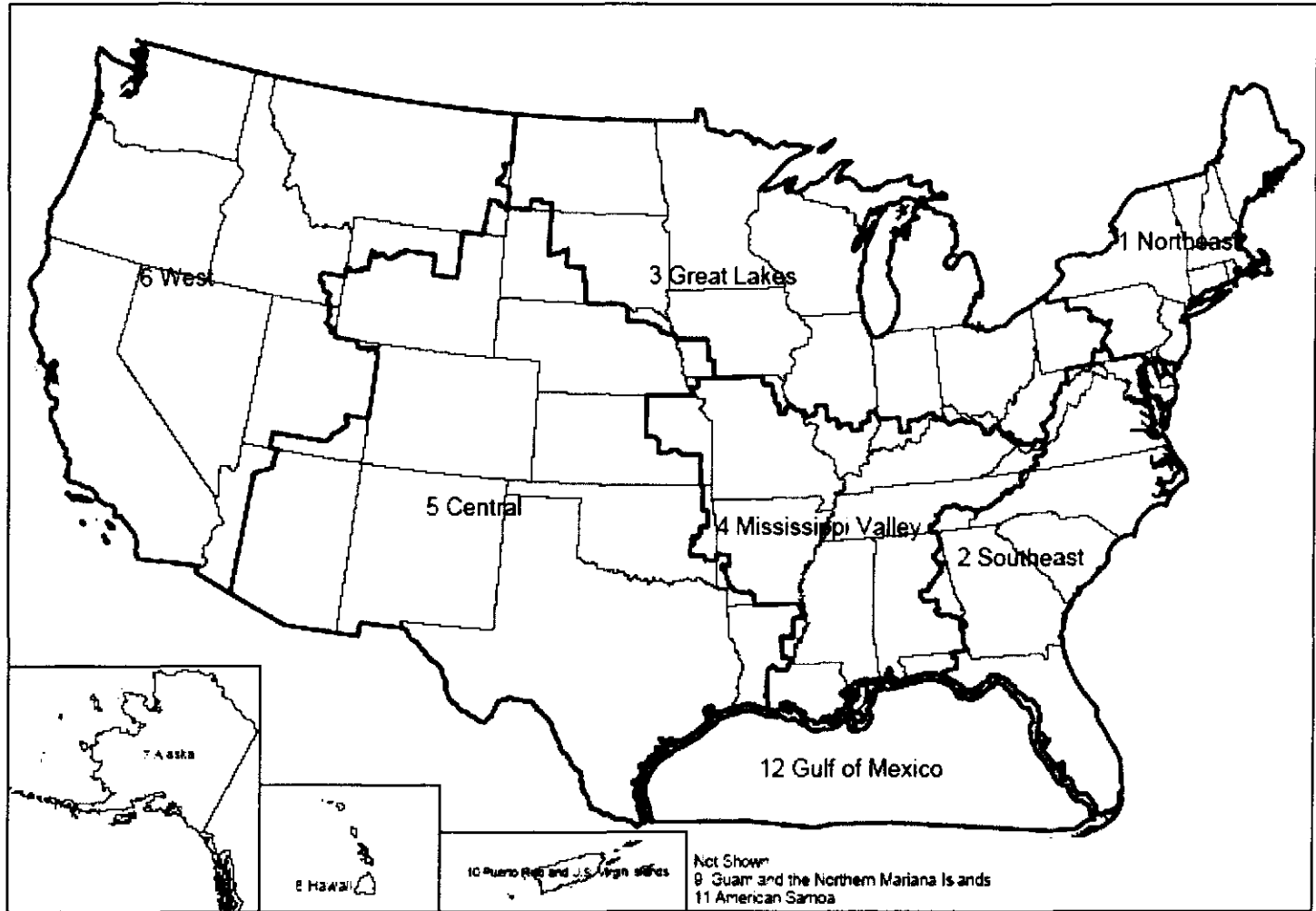
Map B-49

## Economic Areas (EAs)



EAs delineated by the Regional Economic Analysis Division  
Bureau of Economic Analysis, U.S. Department of Commerce  
January 1995

# Regional Economic Area Groupings (REAGs)



Federal Communications Commission, Wireless Telecommunications Bureau, Auctions and Spectrum Access Division



**APPENDIX C****List of Commenters**Comments

3G Americas

CTIA – The Wireless Association

Globalstar

Inmarsat Ventures Limited

MetroPCS

Mobile Satellite Service Providers

Mobile Satellite Ventures Subsidiary LLC

National Telecommunications Cooperative Association (“NTCA”)

Satellite Industry Association

Sprint Nextel

TracFone

Replies to Comments

AT&amp;T

Clearwire Corporation

Ericsson Inc.

SouthernLINC

TeleSpan Communications

T-Mobile USA, Inc.

Verizon

**STATEMENT OF  
CHAIRMAN KEVIN J. MARTIN**

*Re: Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, WT Docket No. 07-71*

The Twelfth Annual Commercial Mobile Radio Service (CMRS) Competition Report demonstrates that the competitive marketplace for wireless services is continuing to bring consumers more choice, better services, and lower prices. Today's report introduces an additional data source that allows for a more granular and accurate analysis of mobile telephone service deployment and competition. This data provides detailed boundaries of the network coverage areas of every operational mobile telephone carrier in the United States based on census block, rather than counties as in previous reports. Because there are 8 million census blocks in the United States – versus only 3,200 counties – this allows for a significantly more accurate and granular assessment than previous reports.

Using this data, the Commission has been able to estimate that approximately 280 million people – or 99.8 percent of the total U.S. population – have one or more different operators offering mobile telephone service in the census blocks in which they live. Lower prices and innovative products have stimulated demand for mobile telephone services. At the end of 2006, there were 242 million mobile telephone subscribers in the United States, up from 213 million at the end of 2005, which translates into a nationwide penetration rate of 80 percent. The additional 29 million subscribers represent the largest absolute increase in the number of subscribers ever. Moreover, during 2006-2007, wireless providers continued to deploy broadband networks that allow typical downstream data transfer speeds of 400-800 kbps. As of May 2007, approximately 82 percent of the U.S. population lived in census blocks with at least one mobile broadband provider. In addition, as of December 31, 2006, 22 million mobile wireless devices capable of accessing the Internet at broadband speeds were in use in the United States, up from 3 million at the end of 2005.

Mobile telephone carriers are also making efforts to improve service quality and introduce new option for customers throughout the country. Since the release of our last report, I have been pleased to hear the announcement by carriers of their plans to introduce a new option that will allow customers to use any device and to use any applications that they choose on the carrier's network. As I noted when we adopted open network rules for the ongoing 700 MHz spectrum auction, wireless customers should be able to use the wireless device of their choice and download whatever software they want onto it. I continue to believe that more openness—at the network, device, and application level—helps foster innovation and enhances consumers' freedom and choice in purchasing wireless service. I am optimistic that these commitments along with the ongoing 700 MHz spectrum auction will ensure an exciting new era in wireless technology for the benefit of all consumers.

**STATEMENT OF  
COMMISSIONER MICHAEL J. COPPS  
APPROVING IN PART AND CONCURRING IN PART**

*Re: Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Twelfth Report, WT Docket No. 07-71*

In past years, I have concurred in the agency's annual *CMRS Competition Report* because I believe it relied on insufficiently granular data and did not define the statutory term "effective competition." Today's *Report* makes important strides towards addressing my first concern. The analysis we release today relies upon census block data—not county-level data—gathered by an independent data provider. This more granular analysis yields quite a different picture of wireless availability in the U.S. than in past reports. We learn, for example, that only 25% of the U.S. land mass is covered by four or more wireless providers—not 49% (the figure generated by applying last year's methodology to this year's data).<sup>747</sup> I greatly appreciate the willingness of Bureau Chief Fred Campbell, Division Chief John Branscome, and the Wireless Bureau staff to conduct this more accurate but also more difficult analysis. I know it took a lot of work, but the end result is a far more accurate and useful report than in previous years.

I nevertheless concur in part in this year's report because it still fails to define the term "effective competition." As I have stated before, we need to define that term ahead of time and *then* assess whether current competition data meets our definition. Instead, we come at the problem backwards—gathering some data throughout the year and, when report time rolls around, letting the data drive us to an undefined conclusion that competition is present. Not only does this *post hoc* process lack methodological rigor, it also leaves consumers, industry, and Congress with no clear idea of how this Commission will react to further changes in the market.

I find our failure to define "effective competition" especially striking because 2007 has been a year in which important concerns have bubbled to the surface about whether the current wireless marketplace delivers consumers an optimal mix of technologies, features, handsets, software, and services. Broad-ranging critiques about the openness of the cell phone market have come from academics, public interest advocates, wireless entrepreneurs, and columnists for the *New York Times* and *Wall Street Journal* covering technology.<sup>748</sup> Concern over the lack of openness in the wireless industry even led a majority of this Commission to implement mandatory openness principles in 22 MHz of the 700 MHz spectrum the Commission will auction next year. While I would have preferred that we adopt a more expansive set of openness principles, I think it is quite significant that 2007 is the first year to see bipartisan recognition of significant barriers to innovation in the wireless marketplace.

<sup>747</sup> Interestingly—and cause for some concern—the comparable figure from last year was 51%. This means that, with methodology held constant, at least one measure of wireless deployment in the U.S. has actually *decreased*. The difference (2%) is far from trivial—it represents 76,000 square miles, an area roughly the size of Nebraska or North Dakota.

<sup>748</sup> See, e.g., Tim Wu, "Wireless Carterfone," *International Journal of Communication*, Vol. 1, p. 389, 2007; Testimony of Jason Devitt at Federal Communications Commission July 31, 2007 Open Meeting, available at <http://www.fcc.gov/realaudio/mt073107.ram> at 9 minutes 30 seconds; "Same name, very different phones," *Consumer Reports* (January 2008), at 38; David Pogue, "Are U.S. Cell Phone Carriers Calcified?" available at <http://pogue.blogs.nytimes.com/2007/07/05/are-us-cellphone-carriers-calcified/>; Walter Mossberg, "Free My Phone," available at <http://mossblog.allthingsd.com/20071021/free-my-phone/>.

I hope that in 2008 the agency can find bipartisan support for adopting an *a priori* definition of “effective competition.” In particular, I hope this definition can incorporate concepts like opportunity to innovate and measures of concentration in the handset and device software markets, along with more traditional concepts like market concentration at the carrier level. (I also incorporate my views from last year that a definition of effective competition must also account for the fact that two of the leading wireless companies are owned in whole or in part by wireline broadband providers.)

I am confident that questions about network openness will only grow in importance in 2008 and beyond, as wireless devices continue their transformation from mobile versions of the traditional telephone to smaller versions of laptop computers. The FCC must dedicate itself to policies that secure the same degree of hardware and software choice and innovation in the wireless market that we see in the market for personal computers and accessories. Of particular importance are the recent set of voluntary openness initiatives announced by carriers and their high-tech partners. Only time will tell whether these voluntary efforts yield concrete consumer benefits. I hope that the next edition of the *CMRS Competition Report* will take a serious and rigorous look at this set of issues.

**STATEMENT OF  
COMMISSIONER DEBORAH TAYLOR TATE**

*Re: Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, WT Docket No. 07-71*

The Commission is required by Congress to produce an annual Commercial Mobile Radio Service (CMRS) Competition Report to monitor the development of competition in this important sector of the telecommunications market. This is the twelfth edition of this report, which for a dozen years has tracked the increasingly competitive nature of the mobile telephony market.

While the Commission's previous reports provided valuable information about the state of the CMRS market, this year's report is especially instructive. Analysis of the extent to which CMRS providers serve a particular geographic area has been improved to supply this information with a significantly greater degree of granularity. Whereas the Commission previously described the number of CMRS providers that served a county – even if they only served a portion of that county – the analysis offered here incorporates census blocks. In contrast to the approximately 3,200 counties in the U.S., there are over 8 million census blocks, the use of which offers a more localized perspective on where CMRS providers compete for customers. Thus, with this latest report, the Commission, Congress, and all other interested parties will have a much better understanding of the state of competition in the CMRS market.

Employing this more finely tuned data, the report finds that competition in the CMRS market in the U.S. is robust. Industry concentration remains low, and no single firm has a dominant market share. Over 95 percent of the U.S. population has access to three or more CMRS providers, and about 90 percent of the population has access to four or more providers. As a result of this competition, prices are very low – averaging seven cents a minute, about a third the level found in Europe. These low prices, in turn, benefit consumers, who have high rates of use – averaging over 700 minutes per month, among the highest of any country in the world.

But there is more than just price competition in the CMRS market. As in other U.S. industries, CMRS providers also compete on the quality of service they offer, as well as the variety of services they offer. Providers' voice and text-messaging services are well-established, and many are now expanding into data applications such as high-speed Internet access. An exciting new development is mobile video, which heralds the entrance of the much-anticipated third screen for video services. While we cannot know what will be the next new service or application in the market, the vigorous competition we see today will help ensure that future developments focus on the needs of consumers, not carriers.

In this competitive environment, Verizon Wireless has recently announced it will open its network at the device and application level in 2008. AT&T and other carriers have had unlocked – and also unsubsidized – handsets available for years, while Sprint Nextel and T-Mobile are working in partnerships such as the Open Handset Alliance to provide a greater variety of Internet-based applications, such as access to applications by Google. These actions are encouraging. They serve as a reminder that firms in a competitive market often will differentiate their goods and services to attract more and more consumers, from the tech-savvy to the tech-simple, by providing increasingly personalized service. This differentiation means much more than just competing on price; it also means offering the devices, applications, quality of service and type of network consumers demand.

Because consumers' preferences as well as technology continue to evolve, I am disappointed that this report does not say more about product and service differentiation as it relates to open access.

Instead, it highlights one policy established for a single band in the upcoming 700 MHz auction. Specifically, this report refers to the *700 MHz Second Report and Order*, in which the Commission found that the market for mobile telephony is “effectively competitive, and that competitive pressures continue to result in the introduction of innovative pricing plans and service offerings,”<sup>749</sup> and then added that “(w)e have not found, however, that competition in the CMRS marketplace is ensuring that consumers drive handset and application choices, especially in the emerging wireless broadband market.”<sup>750</sup> While it is true that the Commission has not determined that the market drives handset and applications choices, this is because the Commission has not fully examined the issue. Moreover, to the extent competition remains vigorous in the CMRS market, I believe the Commission should tread carefully when considering proposals for regulation. We should seek first to understand whether there is a market failure that justifies regulatory intervention.

Apart from these concerns, I commend this CMRS Competition Report. It is a very useful document, with page after page of facts, figures, charts, maps and, for the most part, helpful analysis. Most of all, this report is a testament to how the application of a light regulatory touch to a competitive market has resulted in one of the most innovative and vibrant sectors of the U.S. economy. The report also reflects many months of hard work by the Commission’s dedicated staff, whose efforts are greatly appreciated.

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<sup>749</sup> See Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 06-169, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, WT Docket No. 96-86, *Second Report and Order*, 22 FCC Rcd at 15362-63 ¶ 200 (2007) (“*700 MHz Second Report and Order*”).

<sup>750</sup> *Id.*

**STATEMENT OF  
COMMISSIONER ROBERT M. McDOWELL**

*RE: Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Twelfth Report, WT Docket No. 07-71*

I am pleased that we have documented and are showcasing today the real and tangible consumer benefits that continue to flow from America's robustly competitive wireless industry. There is a great deal of good news here.

Our report shows that more than 95 percent of the U.S. population lives in areas with at least three mobile telephone operators competing to offer service, and more than half of the population lives in areas with at least five competing operators. More simply, the average American has a choice of at least five wireless carriers. Furthermore, no single competitor has a dominant share of the American marketplace. Concentration in the U.S. wireless market actually declined between 2005 and 2006. Just as exciting, the increase of 28.8 million U.S. wireless subscribers added during this same period represents the largest absolute yearly increase ever. Today, almost 250 million Americans are served by more than 150 wireless service providers.

Such explosive competition has yielded wonderful innovation – far beyond anyone's expectations. For example, during 2006 and 2007, wireless providers have continued to deploy mobile broadband networks. As of December 31, 2006, 21.9 million mobile wireless devices capable of accessing the Internet at broadband speeds were in use in the U.S. versus 3.1 million at the end of 2005. This represents a staggering 730 percent increase. Moreover, in the past year alone, the industry has launched MediaFLO live TV service, the Apple iPhone, and myriad location-based services that improve consumers' ability to find and purchase goods and services, and pinpoint their friends' whereabouts.

I have heard others cite the European and Asian wireless marketplaces as ones the U.S. should emulate. Consistent with last year's report, we again conclude that U.S. mobile subscribers lead the world in average voice usage by a wide margin. Western European subscribers average only 150 minutes per month and Japanese subscribers average 145 minutes per month, compared to an average of over 700 minutes per month in the U.S. We also conclude, yet again, that mobile calls are significantly less expensive on a per minute basis in the U.S. (about \$0.07) than in Western Europe (\$0.20 on average) and Japan (\$0.26). In addition, the percentage of mobile subscribers who use their mobile handsets to browse the Internet is slightly higher in the U.S. (10.7 percent) than in many Western European nations (less than 10 percent in Italy, Spain, France, and Germany). Finally, today's report concludes that the U.S. mobile penetration rate is now, for the first time, on par with those in Japan and part of Western Europe.

In fact, I am delighted that the international community has similarly taken notice of the benefits associated with the robust American mobile telephony market. In its own November 2007 report, THE INTERNATIONAL COMMUNICATIONS MARKET 2007, the United Kingdom's Office of Communications (OFCOM) notes the rise of mobile voice, growth of non-SMS mobile data services, and the emergence of mobile broadband across the international telecommunications markets. Like today's report, the OFCOM report also concludes that the U.S. has the least concentrated mobile marketplace, and concludes that the recent rapid growth in mobile subscriptions has put the U.S. ahead of Japan in terms of mobile concentration. In addition, OFCOM's report notes that Americans are the most satisfied with the speed of their broadband connections (85 percent), whereas Japanese consumers are the least satisfied (41 percent).

2006 also saw the continued increased availability of mobile handsets with Wi-Fi data service capability. Our report describes the efforts of two carriers who launched dual-mode cellular-Wi-Fi handsets designed to make voice calls on cellular GSM networks and at Wi-Fi hot spots (both at home and in public) using voice-over-Wi-Fi technology, with seamless handoff between the two types of networks. More recently, in early November 2007, the Open Handset Alliance introduced Android, a Linux-based software stack that consists of an operating system, middleware, a user interface and applications. The Android kit, which has been in development since 2006 and is expected to be released early next year, will allow software entrepreneurs to freely access the source code and customize applications for their individual purposes. Most recently, and after almost a year in the making, the two largest wireless carriers each announced initiatives to allow customers to use any wireless device and to employ elective applications on their respective networks.

Given the timing of all of these positive developments – which began sprouting in 2006 and even earlier – I question the assertion made by some that the government can claim credit for spurring device and application portability. Indeed, certain discussions set forth in this report appear to apply a shiny new gloss on the Commission’s very recent, and as yet untested, open access regulations in the 700 MHz spectrum band. I continue to be concerned that the Commission may have imposed an artificial ceiling that will hamper ongoing market-driven innovation and creativity. I also question the Commission’s unwillingness to admit that the wireless industry is (and has been) responding to consumer demand, not prospective regulatory fiats. In sum, I strongly caution against attempts to “spin” the data contained in this report into an *ex post facto* justification of regulatory mandates.